(6) The striated muscles are affected by a tonic spasm which differs in intensity in different muscles and rarely affects those of the eye.	(6) The striated muscles are affected by a spasm which at first is tonic, later clonic. It varies in intensity in different muscles and the eye muscles are rarely affected.
(7) Alcohol has a favorable action in moderate doses. Fever also produces improvement, but cold and fatigue make the symptoms worse.	(7) The same.
(8) Mechanical irritation causes spasms of the muscles which gradually relax.	(8) The same.

Lundborg believes that there are so many points of similarity in the two diseases, that the apparent intimate relation cannot be ascribed merely to accident. There is much evidence to prove that myoclonia is due to a poison generated somewhere in the system.

9. *Babinski Toe Phenomenon.*—Bickel has tested the Babinski reflex in more than 300 persons, mostly women and children, and found it positive whenever there was reason to believe in the existence of a lesion in the pyramidal tracts. It is also occasionally positive in hysteria, rarely positive in healthy adults, sometimes slightly indicated on one side. Occasionally it was positive at one investigation and negative at another. Often, however, in persons with a healthy nervous system in whom the reflex was negative while awake it became positive during deep sleep. Under these circumstances it was usually energetic and not slow as in pathological conditions. Also in cases of chloroform narcosis the reflex was found to be positive, and therefore Bickel concludes that it is an indication of functional inactivity of the cortex.

10. *Briefer Communications.*—Rosenfeld reports the case of a man twenty-eight years of age who received a severe injury in the lumbar portion of the spinal column causing immediate paralysis of the legs. Some months later on examination there was found to be increase in the reflexes in the lower extremities, the gait was impaired, there was loss of control over the sphincters, disturbance of sensation on the outer and upper sides of both feet, over the pubic and sacral regions and extending along the back of both thighs, that is, a typical saddle anesthesia. A diagnosis was made of a lesion of the conus medullaris.

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ARCHIVES DE NEUROLOGIE.

(No. 85, January, 1903.)

1. The State of the Fundus of the Eye in General Paretics and its Initial and Final Anatomical Lesions. KERAVAL and RAVIART.
2. The Evolution of Obsessions and their Passage into Delusions. SÉGLAS.
3. Motor Re-education in Diseases of the Nervous System; its Application to the Ataxia of Tabetics. CONSTENSOUX.

1. *The State of the Fundus of the Eye in General Paretics.*—The author states that it is only in the second half of the nineteenth century, that, thanks to the ophthalmoscope, neuropathologists were able to examine the fundus of the eye of general paretics. Since 1853 Lasègue, Moreau, Marcé, Dagonnet practiced this examination, but left no data concerning the alterations they observed; Bouchut, relating three cases of general paresis, notes in each the existence of papillary atrophy. The author re-

ports the notes of Voisin and Magnan in 1868, of Tebaldi in 1870 and of Noyes in 1872. In 1879 the thesis of Boy and the memoirs of Doutrevente appeared, who, having examined 47 general paretics, came to the following conclusions: "Papillary atrophy either commencing or confirmed is met with from five to ten times in one hundred cases. We remark more often some vascular alterations, such as especially the dilatation of the veins, the alteration of the walls and some hemorrhagic spots or a generalized congestion of the fundus of the eye." The author gives the results of his studies of 51 cases of general paresis at the asylum of Armentiéres. He also gives full history of three cases and finishes his article of thirty pages (which contains 9 illustrations of sections made), with the following conclusions: "From the ophthalmoscopic examination of out of 51 general paretics, there appears the following: (1) the majority of these patients at the asylum of Armentières present some notable lesions of the fundus of the eye; there are scarcely any of them, except those who are in remission who do not present it; (2) we find in 7 patients, in whom general paresis has reached an advanced stage, 5 cases of white papillary atrophy, one of gray atrophy, one of bilateral posterior sclerotitis without myopia; (3) we find in 13 paretics a state of pale papilla, light in color; (4) in 22 others a mildly light appearance was observed in a segment of the papilla, whether external, internal, inferior or superior with undefined border. The two appearances are the preliminary states of papillary atrophy; (5) in general paretics in remission or attacked by a retarded form, it has been impossible to find any ophthalmoscopic lesion; (6) the ophthalmoscopic examination has in all points been confirmed by the microscope, it operates the same in the less accentuated cases, in papillitis and in neuritis presenting the same characters as in chronic diffuse meningoencephalitis: infiltration of the higher elements of the papilla and of the optic nerve by the connective tissue and neuroglia cells, thickening of the connective tissue of the nerve, diffuse alterations in the ganglion cells and the nerve fibers of the retina susceptible of ending in cases the most advanced, the total destruction of the nerve cells of the retina and the production of papillary sclerosis." There is subjoined a list of 29 authors who treat of the subject.

2. *Evolution of Obsessions and their Passage into Delusions.*—The author considers that the opinion generally entertained in France, that obsession does not evolve, does not transform itself, never ends in delusion properly so-called, is open to discussion. The author discusses obsession under the heads of melancholia, mental confusion, dream-like delusion and systematized delusions. One of the cases he observed is the following: Miss J. presents, since the age of eighteen, obsessions of doubt in the form of interrogations; metaphysical inquiries; later obsessional ideas in form of contrast, mania of blasphemy, impulses to blaspheme when praying in church, to strike the persons she loves best; doubt upon the execution of her divers impulses. At the age of twenty-four Miss J., who hitherto had full knowledge of her obsessions, comes to consider them as the action of an evil spirit. She, who hitherto, in analyzing herself, said very justly: "It is as if there was in me a second thought, which always contradicts me and urges me to evil, when I have the idea of good," finishes by believing herself really the sport of a wicked being, of a demon, which possesses her, opposes itself to all her acts, inspires and directs her at its will, and her conviction is such that she sees no succor except in exorcism. "According to Pitrés and Régis the forms which finally end in systematized delusion are obsessional states with symptoms chiefly intellectual, and those which turn into anxious depression are obsessional states with symptoms chiefly emotional, that is to say, phobias." "My personal observation," says the author,

"does not authorize me to partake of this view, applicable perhaps to some particular cases. I would rather believe that obsessions, which may finally end in characterized insane accidents, whatever may be the form, are chiefly obsessions called intellectual and, in particular, the different types described under the general name of *folie du doute.*"

3. *Motor Re-education in Diseases of the Nervous System; its application to the Ataxia of Tabetics.*—The subject is discussed under two heads: (1) Motor re-education in general, and (2) the re-education of the ataxic. It may be understood, says the author, that in cases where some sort of perturbation of the nervous system has deranged that delicate mechanism, without at the same time destroying completely the elements of the neuromuscular motor system and notably where voluntary contractions are not abolished, a new education of the altered centers can re-establish the equilibrium of the contractions and consequently the lost functions. Experience proves that this hope is legitimate. This is the first principle of motor re-education. It is a second which extends our field of action. No movement is effected without the simultaneous concourse of several muscles and at times, when one of them becomes insufficient, others may compensate its deficient action. He cites the cases of aphasic and agraphic patients, who may acquire special education. Re-education, the method based upon these two principles, can be defined as the totality of the processes of therapy, by methodical movements, which look especially to the re-establishment of functions, either by correcting, by a new impulse, anomalies of function in nervous elements or in attributing to other organs, functions belonging primarily to destroyed organs. At times function alone is disturbed, but in many other cases the organs themselves are injured and should themselves be treated by independent processes of re-education. It is necessary to associate other methods of physical therapy. In the matter of re-education general knowledge is only of value for the applications which one can make of it to each particular case. There cannot exist an immutable series of exercises applicable to all patients stricken with the same affection. It is necessary in order to direct the treatment usefully, after the diagnosis is established, to determine exactly the nature of the troubles observed, their localizations, their degree in each muscular group; thus only is one able to foresee what it is possible to expect of these muscles and what exercises of re-education suit them; then we should watch closely the effects, modify them according to the changes which are observed and seize from day to day the various indications which present themselves. We should take great account of the symptoms observed consecutively with the motor troubles, the disorders of sensation for example, the state of the forces, the intelligence and good will of the patient. To re-educate a patient is a work essentially clinical and consequently varies in each particular case, the success of which depends no less upon the ability of the physician than upon the symptoms which he has to combat. This is why we think that re-education can only be well undertaken by a physician and not by his assistants, and that by a physician having experience in nervous affections and knowing the difficulties of the clinic; by a specialist familiar with therapy by methodical exercises. Re-education may be applied to the following affections: (1) Static and locomotor; (2) movement of superior members; (3) troubles of phonation; (4) movements of the face and neck; (5) movements of the eyes; (6) respiratory movements: (*a*) functional troubles, tics and stammering; (*b*) troubles of organic origin, cardiac, emphysematous, tuberculous; (7) movements of the heart. The author gives the history of the re-education of the ataxic. The Swiss physician Frenkel obtained the first important results. He states that Frenkel's exercises were more empirical than scientific, but he first formulated the idea that ataxia regularly treated is not incurable. If we

have been hitherto powerless to re-establish reflex muscular action when abolished, we can still in a large measure diminish the number and frequency of involuntary movements. We know that muscular sensibility can supply articular sensibility, which is always more profoundly affected; that, save in grave cases, muscular anæsthesia with its divers varieties is rarely absolute; that muscular sensation can be ameliorated by re-education, thus become a great aid in the re-establishment of equilibrium. It is not rare to see in tabetics groups of muscles that in appearance are paralyzed and in which methodical exercises, little by little, permit patients to recover a more or less correct voluntary contraction. The first part of the treatment of the ataxic is the re-education of each muscular unit; the second part is the treatment of incoordination. What is most interesting, is the understanding of contraindications, for before undertaking a treatment long and difficult, we should be assured that it is not to be injurious and that it would really be useful to the patient. The contraindications are, *e. g.* cachexia of the subject, the existence of cardiac troubles, or asthenia very marked, the co-existence of certain symptoms, arthropathy, fragility of bones, amaurosis, psychical troubles, or even deficiency of intelligence. Since we understand better the treatment of tabes, we do not consider it an affection having an evolution fatally progressive. When we are aware of a period of improvement, after one of decline, then comes the moment to regain the whole or part of the lost ground and to repair the disorders which have arisen. The cases where re-education gives no results are explained in our opinion, by one of the following reasons; certain contraindications have been misunderstood, the tabes is aggravated, the patient is refractory or inattentive, or the re-educator is not equal to his task. The author insists on special experience in the physician, in exercises adapted to each case, in care that they be not too prolonged, but at the same time frequent; "little and often" is the rule. During the daily exercises, which the physician directs in person, he should give the patient the most minute directions as to the movements which he is to execute in his absence. It is well to interest an intelligent man in his treatment by giving him some explanations. The improvement of some of the patients excites his emulation and the sight of the troubles of others inspires some resignation. The author gives brief histories of 11 cases: The first, an officer in the army, forty years of âge, confirmed tabes for seven years; motor incoördination for two years, had to abandon active service, walked with incertitude, assisted by a cane, with difficulty ascended and descended stairs, understood perfectly his treatment. At the end of four months there was scarce a trace of incoördination, he returned to his regiment, mounts his horse. Since the summer of 1901 he has not left active service. No. 2. At the end of four months rejoined his regiment. No. 3. At the end of three and a half months left the hospital alone and afoot. No. 4. Had been for seven months in bed and absolutely incapable of standing upright. At the end of the year she is able to take care of herself, provided she is prudent, but never dares walk in the street unaccompanied. "If only a few years ago tabes was in the great majority of cases considered a malady without appeal, almost fatally progressive and necessarily ending in confirmed ataxia, today, neurologists agree that such a picture no longer corresponds very often with the facts; not only does the malady spontaneously present durable remissions, not only must we settle with tabes frustes, when it only betrays some mild symptoms and does not evolve, but we know that we are not unarmed before the danger of posterior sclerosis; we know that our therapeutic methods result more and more frequently in arrest of the malady. Several physicians have also been able to speak of the curing of tabes, thus bringing together two words which hitherto seemed incompatible; it is to say, how changed is the prognosis of the malady; it is the same in the most grave of its symptoms, ataxia. Numerous observations prove that ataxia is not incurable; we can now oppose to it rational and efficacious therapeutic methods." RICHARDS (Amityville, L. I.).

AMERICAN JOURNAL OF INSANITY

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1. Nature and Pathology of Myoclonus Epilepsy. CLARKE and PROUT.
2. Nurses in Hospitals for the Insane. RICHARDSON.
3. The Mental Status of Czolgosz, the Assassin of President McKinley. CHANNING.
4. Litigious Insanity, with Report of a Case. LANE.
5. Sanitation in Asylums for the Insane with Especial Reference to Tuberculosis. MAC CALLUM.
6. Some Results and Possibilities in Family Care of the Insane in Massachusetts. COPP.
7. Tent Life for the Demented and Uncleanly. WRIGHT.
8. Tent Life for the Tuberculous Insane. HAVELAND.
9. Sympathetic Insanity in Twin Sisters. WALKER.

1. *Nature and Pathology of Myoclonus Epilepsy.*—It is an essentially rare affection, only 57 cases have as yet been recorded, which include the authors' four. Many conditions have been described, which are unquestionably related to this disease type, if not such in reality. Unverricht was the first to definitely describe it in 1891. Probably many cases have escaped observation. Myoclonus has been found to be associated with general paresis and other cortical lesions. The predisposing causes of myoclonus are found largely in family degeneracy, essential epilepsy equally so in this respect and hence occurs in several generations of the same family, and it is doubtful if myoclonus-epilepsy ever occurs in an individual of healthy stock. Various forms of degeneracy may lead up to myoclonus-epilepsy and other manifestations of degeneration, like insanity, chorea, etc., which are always found in other members of the family. The stigmata of degeneration are well marked in such families. The immediate exciting cause alleged may be trivial. Evidence of traumatism to the head or other parts of the body or fright is found in a small percentage of cases. Fatigue from overwork, alcoholic debauches and infectious fevers occasionally present. These are doubtless of serious moment, only in so far as they induce a condition favorable to autointoxication. This applies especially to extreme fright. The autointoxication may be external to the intestinal tract, is more probably dependent on a condition of faulty chemotaxis of the cortical cells. Men are more often affected, in the ratio of five to three. All the recorded cases developed prior to twenty, except one at thirty. In three-fourths of them between nine and fifteen. In about half of the cases the epilepsy appears first, in one-third the myoclonus, in the balance the two simultaneously. The epileptic attacks usually nocturnal at first, later diurnal. As a rule epilepsy continues through life, but in a few instances exists only at the beginning of the disease. The seizures are never preceded by an aura, but premonitory signs of increased myoclonic contractions are in evidence, yet seizures may not occur at their climax. The epileptic attacks are often abortive, the tonic stage being absent, tongue-biting and post-epileptic coma are also wanting. The muscles involved in the epileptic seizures are most often those affected by the myoclonic contractions. There is no periodicity in the occurrence of the seizures and death from status epilepticus unknown, yet a sort of myoclonus status often hastens or actually causes death. Long remissions in the epileptic paroxysms often occur, years even intervening. Many times consciousness is only disordered or partially lost and post-epileptic automatism rare. Mel-